ABSTRACT

Modified Fluorescent Proteins for Detecting Protease Activity

The present invention concerns fluorescent proteins modified such that said modified fluorescent protein incorporates a cleavage site for a protease, cleavage of said modified fluorescent protein at said cleavage site by said protease causing the alteration of at least one of the emission and excitation spectra of said modified fluorescent protein. In particular, the invention is concerned with using these modified fluorescent proteins as probes for detecting protease activity in living cells during the programmed cell death process (apoptosis).

Also provided are nucleic acid sequence encoding same, recombinant DNA constructs expressing same, cells transformed or transfected with same, methods for detecting protease activity, and methods of detecting agents which affect protease activity, and kits for same.